REMARKS

Claims 1, 8-18, and 23-25 are pending in the application. New claims 26-27 have been added with this response. Applicants note with appreciation the allowance of claims 13-18 and 23-25. Reconsideration of the application in light of the following remarks is respectfully requested.

I. REJECTION OF CLAIMS 1 AND 8-12 UNDER 35 U.S.C. § 103(a)

Claims 1 and 8-12 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent Publication No. 2004/0120339 (Ronciak) in view of U.S. Patent Publication No. 2004/0249998 (Rajagopalan et al.). Withdrawal of this rejection is requested for at least the following reasons.

i. The combination of Rajagopalan et al. with Ronciak is improper to teach assembling a coalesced array from a coalesced physical buffer and a non-coalesced physical or virtual buffer, as provided in claim 1.

Independent claim 1 recites a method for partially coalescing transmit buffers, comprising assembling a coalesced array from a coalesced physical buffer and one or more respective non-selected and non-coalesced virtual or physical buffers. The Office Action of 7/1/10 concedes that Ronciak fails to teach this aspect of the present invention, but instead relies upon Rajagopalan et al. to teach a coalesced array that is assembled from a coalesced physical buffer and one or more respective non-selected and non-coalesced virtual or physical buffers, stating that "one of ordinary skill in the art would have relied upon Rajagopalan et al. for the purpose of constructing frame for transmission by appending a prototype header to buffered payload data according to a specified segment size". (*See, O.A. of 7/1/10*, p. 3). However, as will be more fully appreciated below, ***combination of Rajagopalan et al. with Ronciak is improper to teach assembling a coalesced array from a coalesced physical buffer and a non-coalesced physical or virtual buffer***, as recited in claim 1.

Ronciak teach selectively retrieving frames from a coalesced physical buffer 508

using a "SKB" (pointer to a socket buffer) and one or more clone SKBs. (*See, e.g.,* Fig. 5). Respective SKBs comprise pointers (or addresses) that correspond to header information and data that define frames stored within the buffer 508. Therefore, Ronciak teaches SKBs (associated with claimed virtual buffers) associated with data frames (associated with claimed physical buffer) located within a coalesced buffer 508 (associated with claimed coalesced physical buffer), ***wherein the data frames and SKBs comprise both a header and data***.

In contrast, Rajagopalan et al. teach a method for editing outbound data frames. The method comprises utilizing a Transmission Control Protocol (TCP) stack 215 to generate protocol headers which are stored in TCP stack memory space 225. (*See, e.g.,* Fig. 2 and par. [0132]). The protocol headers are read by a HOT unit 250 from the TCP stack memory space 225 and are appended to data for transmission that is read by HOT unit 250 from an application memory space 227. (*See,* par. [0132]). Therefore, as taught by Rajagopalan et al. ***outbound frames*** (associated with claimed coalesced array) ***are formed by appending a protocol header*** (associated with claimed non-coalesced physical or virtual buffer) ***to data for transmission*** (associated with claimed coalesced physical buffer).

Accordingly, it would not have been obvious to assemble a coalesced array from a coalesced physical buffer and a non-coalesced virtual or physical buffer, as recited in claim 1, ***since the protocol headers taught by Rajagopalan et al. are not properly associated with the SKBs or data frames taught by Ronciak***. For example, as taught by Ronciak the data frames (associated with physical buffers) and SKBs (associated with virtual buffers) comprise header and data information, whereas the protocol header data (associated with non-selected virtual and physical buffers) taught by Rajagopalan et al. do not contain data information. Therefore, ***the motivation recited in the Office Action is not present since the virtual buffers taught by Ronciak comprise both a header and data, and therefore unlike the protocol header of Rajagopalan et al. (that only comprises a header) would not be appended to data for transmission***.

Accordingly, for at least the above reason, withdrawal of the rejection of claim 1, and claims dependent therefrom, is respectfully requested.

II. NEW CLAIMS 26-27

Claims 26-27 have been added with this response and are believed to be patentably distinct over the cited art for at least the following reasons:

i. The cited art fails to teach assembling a coalesced array from virtual buffers or physical buffers comprising header information and data, as provided in claim 26.

New claim 26 recites a method for partially coalescing transmit buffers, wherein assembling a coalesced array comprises assembling the coalesced physical buffer with one or more virtual buffers comprising header information and data or with one or more physical buffers comprising header information and data. (*See, e.g., Applicant's originally filed specification of 11/4/03*, p. 7, lns. 21-22 and p. 10, lns 21-22). The Office Action concedes that Ronciak fails to teach assembling a coalesced array, but instead relies upon Rajagopalan et al. to teach a coalesced array that is assembled from a coalesced physical buffer and one or more respective non-selected and non-coalesced virtual or physical buffers. (*See, O.A. of 1/5/10*, p. 3, lns. 8-16). However, as will be more fully appreciated below, ***Rajagopalan et al. fail to teach assembling a coalesced array from virtual buffers or physical buffers comprising header information and data***, as recited in claim 26.

As stated above, Rajagopalan et al. teach a method for editing outbound data frames comprising utilizing a TCP stack 215 to generate protocol headers which are stored in TCP stack memory space 225. (*See, e.g.,* Fig. 2 and par. [0132]). The protocol headers are read by a HOT unit 250 from the TCP stack memory space 225 and are appended to data for transmission that is read by HOT unit 250 from an application memory space 227. (*See,* par. [0132]). Therefore, as taught by Rajagopalan et al., outbound frames (associated with claimed coalesced array) are

formed from a protocol header for transmission read from TCP stack memory space 225 (associated with claimed non-coalesced physical or virtual buffer) and data for transmission read from application memory space 227 (associated with claimed coalesced physical buffer).

In contrast, claim 26 recites a method for assembling the coalesced array comprises assembling a coalesced physical buffer with one or more virtual buffers ***comprising header information and data*** or with one or more physical buffers ***comprising header information and data.***

Since Rajagopalan et al. do not teach that the protocol header ***comprises header information and data*** or that the data for transmission ***comprises header information and data,*** new claim 26 is believed to be patentably distinct over the cited art.

ii. The cited art fails to teach assembling a coalesced array comprising an entire coalesced physical buffer, as recited in claim 27.

New claim 27 recites a method for partially coalescing transmit buffers, wherein a coalesced array comprises an entire coalesced physical buffer. (*See, e.g., Applicant's originally filed specification of 11/4/03*, Fig. 3). The Office Action concedes that Ronciak fails to teach assembling a coalesced array, but instead relies upon Rajagopalan et al. to teach a coalesced array that is assembled from a coalesced physical buffer and one or more respective non-selected and non-coalesced virtual or physical buffers. (*See, O.A. of 7/1/10*, p. 3). However, as will be more fully appreciated below, ***Rajagopalan et al. fail to teach assembling a coalesced array comprising an entire coalesced physical buffer***, as recited in claim 27.

As stated above, Rajagopalan et al. teach a method for segmenting outbound data using a DMA engine 310. (*See*, Fig. 11). In step 1111, the DMA engine 320 "determines ***a portion of the data for transmission included in the transmit buffer*** based on the maximum segment size." (*See*, par. [0135])(emphasis added). Therefore, ***Rajagopalan et al. teach that only a portion of the transmit buffer***

(associated with claimed coalesced physical buffer) ***is provided to the output data frame*** (associated with claimed coalesced array).

In contrast, claim 27 recites that the coalesced array comprises the ***entire*** coalesced physical buffer. Accordingly, since ***Rajagopalan et al. fail to teach assembling a coalesced array comprising an entire coalesced physical buffer***, claim 27 is believed to be patentably distinct over the cited art.

III. CONCLUSION

For at least the above reasons, the claims currently under consideration are believed to be in condition for allowance.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should any fees be due as a result of the filing of this response, the Commissioner is hereby authorized to charge the Deposit Account Number 50-1733, AMDP772US.

Respectfully submitted,
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